

# SIEMENS

PATENT

Attorney Docket No. 2002P19478WOUS

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Inventor:	A. R. Beeck	)	Group Art Unit:	1791
		)		
Serial No.:	10/551,740	)	Examiner:	James M. Sanders
		)		
Filed:	September 30, 2005	)	Confirmation No.	4282

Title: METHOD FOR PRODUCING CERAMIC OBJECTS

Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

### APPELLANT'S REPLY BRIEF

Sir:

This Reply Brief is responsive to the Examiner's Answer mailed on August 2, 2010. This is not a substitute for the Appeal Brief. Any ground for rejection in the Examiner's Answer that is not refuted herein is considered by Appellant to have been sufficiently argued in the Appeal Brief, such that no further comment is needed herein. Arguments herein focus on errors and new arguments presented in the Examiner's Answer.

Regarding the proposed modification of Deckard based on Sachs et al., the Examiner attempted to refute the Appellant's argument that such a proposed modification would involve moving the powder 22 from the structure 28 of Deckard into a dispersion head, to form layers of a first and second powder mix, in between which a binder material would be applied, as taught in Sachs et al. In support of this argument, the Examiner argued that Sachs et al. teaches a second

powder mix in a second region, and that the proposed modification of Deckard “is only with this element of and not the whole of the Sachs et al. reference,” and thus that successive layers of a first and second powder mixes would not be bonded using a binder material (Examiner’s Answer, p. 10). However, despite the Examiner’s insistence that such a modification of Deckard would be obvious to one of ordinary skill in the art, the Examiner failed to provide any answer to numerous critically basic questions which one of ordinary skill in the art must know before performing such a modification, such as:

- (1) how will the second powder mix be distributed? (the Examiner expressly excluded the dispersion head of Sachs et al. which previously held the second powder)
- (2) will the first and second powder mixes be positioned in a common area or different areas?
- (3) what optics will be added to vary the laser 12 path, and how will the path be adjusted, based on the addition/placement of the second powder mix?
- (4) how will the laser 12 power be adjusted, as it passes over each of the first and second powder mix?

Obviously, the Examiner cannot provide answers to these critical questions which would be answerable if such a modification of Deckard was obvious, since the Examiner relied on the Appellant’s specification, using improper hindsight reconstruction, rather than the teachings of the prior art, to conceive of the proposed modification. Indeed, the rejection of independent claim 17 is fatally deficient.

Additionally, the Examiner mischaracterized the Appellant’s argument regarding whether the claimed invention produces a “new and useful result.” In the Appellant’s Appeal Brief, the Appellant responded to an argument that the proposed modification of Deckard based on the Sachs et al. is merely a duplication of parts (Appeal Brief, p. 5), and that the Examiner failed to consider a “new and useful result” exception to the “duplication of parts” portion of the MPEP (Appeal Brief, p. 5). The Appellant argued that the claimed invention does amount to a new and useful result (Appeal Brief, p. 5). In the Examiner’s Answer, the Examiner puts forth the unsupported argument that the claimed invention does not produce a new and useful result, since “such result is predictable and one of ordinary skill in the art would expect it.” (Examiner’s Answer, p. 10). Paradoxically, the Examiner considers the proposed modification of Deckard to be “predictable” and that one of ordinary skill would “expect it,” yet the Examiner cannot answer

any of the critical questions listed above (without relying on the Appellant's disclosure) which one of ordinary skill in the art must know prior to conducting such a modification. Accordingly, since the Examiner cannot support the argument that the claimed invention is "predictable," and thus the claimed invention does produce a new and useful result and accordingly, the duplication of parts portion of MPEP 2144.04(VI)(B) is inapplicable. In the Examiner's Answer, the Examiner engaged in improper hindsight construction, in an effort to demonstrate that no improper hindsight construction took place in the rejection. The Examiner first recognized the Appellant's argument of alleged improper hindsight was based on "the contention that the dispersion heads would be moved 'in such a way' as to not interfere with the performance of the laser is wholly unsupported by any teaching of the prior art", and then the Examiner repeated the alleged improper hindsight by declaring that the Examiner "maintains that it is well within the grasp of one of ordinary skill in the art to move the dispersion heads in such a way so as to..." (Examiner's Answer, p. 10). The Examiner failed to cite to any portion of the teaching of the prior art, to provide a teaching or disclosure as to how one of ordinary skill in the art would move the dispersion heads "in such a way..." Accordingly, the Examiner engaged in repeated instances of improper hindsight reconstruction, and thus the rejection of independent claim 17 is fatally deficient.

The Examiner misrepresented the claim language of independent claim 17, namely, that "Examiner, however, maintains that incomplete melting is equivalent to sintering and points out that there are two types of sintering: solid state sintering...and liquid state sintering..." (Examiner's Answer, p. 11). The Examiner misrepresented the language of claim 17, by merely requiring that the prior art disclose "incomplete melting" rather than the recited language of sintering. As the Examiner is aware, "'All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).'" MPEP 2143.03. Indeed, the Examiner failed to consider the actual language of independent claim 17, but instead replaced the claim language of "sintering" with Examiner-selected language of "incomplete melting." Accordingly, the rejection of independent claim 17 is fatally deficient, per MPEP 2143.03.

Additionally, the Examiner listed various personal opinions, attempted to label these personal opinions as statements of fact without any supporting citation to the prior art teaching, and then attempted to use those purported statements of fact in rejecting independent claim 17.

The Examiner “points out that there are at least two types of sintering: solid state sintering and liquid state sintering. Examiner finds no where in claim 17 that it is limited to solid state sintering.” (Examiner’s Answer, p. 11). As the Examiner is aware, “It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. In re Ahlert, 424 F.2d at 1091, 165 USPQ at 420-21.” MPEP 2144.03. Indeed, the Examiner failed to cite to any prior art reference in support of the alleged equivalency of incomplete melting and sintering, and the various types of sintering. These alleged statements are not common knowledge, since melting and sintering are two distinct processes. Thus, the Appellant hereby traverses the Examiner’s alleged statements of fact. As the Examiner is aware, “If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also Zurko, 258 F.3d at 1386, 59 USPQ2d at 1697” MPEP 2144.03. Paradoxically, the Examiner failed to scrutinize the prior art as to whether it discloses the claimed invention with the same rigorous standard which the Examiner employed above as to whether the claims recite specific language, where the Examiner “finds no where in claim 17 that it is limited to only solid state sintering.” (Examiner’s Answer, p. 11). Indeed, the Examiner’s statements of personal opinion without any supporting citation cannot be relied on in the rejection of independent claim 17, per MPEP 2144.

### Conclusion

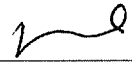
For the reasons provided in the previously filed Office Actions, expanded upon in the Appeal Brief, and in view of the deficiencies identified in the Examiner's Answer, Appellants respectfully submit that the rejections are in error. The Board is therefore respectfully requested to reverse the final rejection of the Examiner and to remand the application to the Examiner with instructions to allow all of the pending claims.

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Please grant any extensions of time required to enter this paper. Please charge any appropriate fees due in connection with this paper or credit any overpayments to Deposit Acct. No. 19-2179.

Respectfully submitted,

Dated: 09/01/10

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